Quarterly Update of Activities of the Delta Watermaster

Michael Patrick George Delta Watermaster



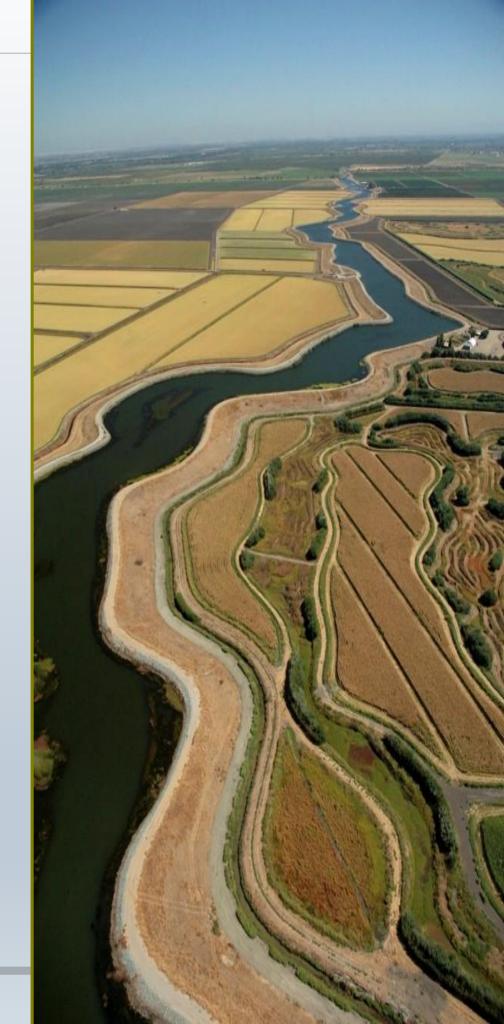


February 22, 2018



Overview

- Publication of Consumptive Use Study
- Rollout of Senior Water Right Review
- Water Quality Plan Update
- Challenges of Implementing Diversion Measurement Regulation in the Delta
- Planning for Climate Change



Study of Crop Consumptive Use in the Delta

- Peer Review Completed
- Final Draft Report Distributed to Sponsoring Organizations
- Major Advance in Remote Sensing Application
- Follow-up Research Funded for 2018 (Consumptive Use of Fallowed Cropland)
- Open Water, Riparian Vegetation, Floating Weeds Are Next (but currently unfunded)

What Have We Learned? How Will We Apply It?

- Remote Sensing of Consumptive Use Provides Accurate Estimates
 - ✓ "Close Enough for Government Work"
 - ✓ Basis for "Rebuttable Presumption" of Consumptive Use
 - ✓ Creates "Crowd Correction" Feedback Loop
 - ✓ Improves Transparency, Timeliness; Reduces Cost and Controversy
- Open Evapotranspiration: Make Accessible, Understandable and Actionable
- Implications for Both Operations & Management and Long-term Planning

Rollout of Documentation Supporting Senior Water Rights Claims in Delta Watershed

Background: Information Order Issued in 2015 to Gather Data about Seniors' Use

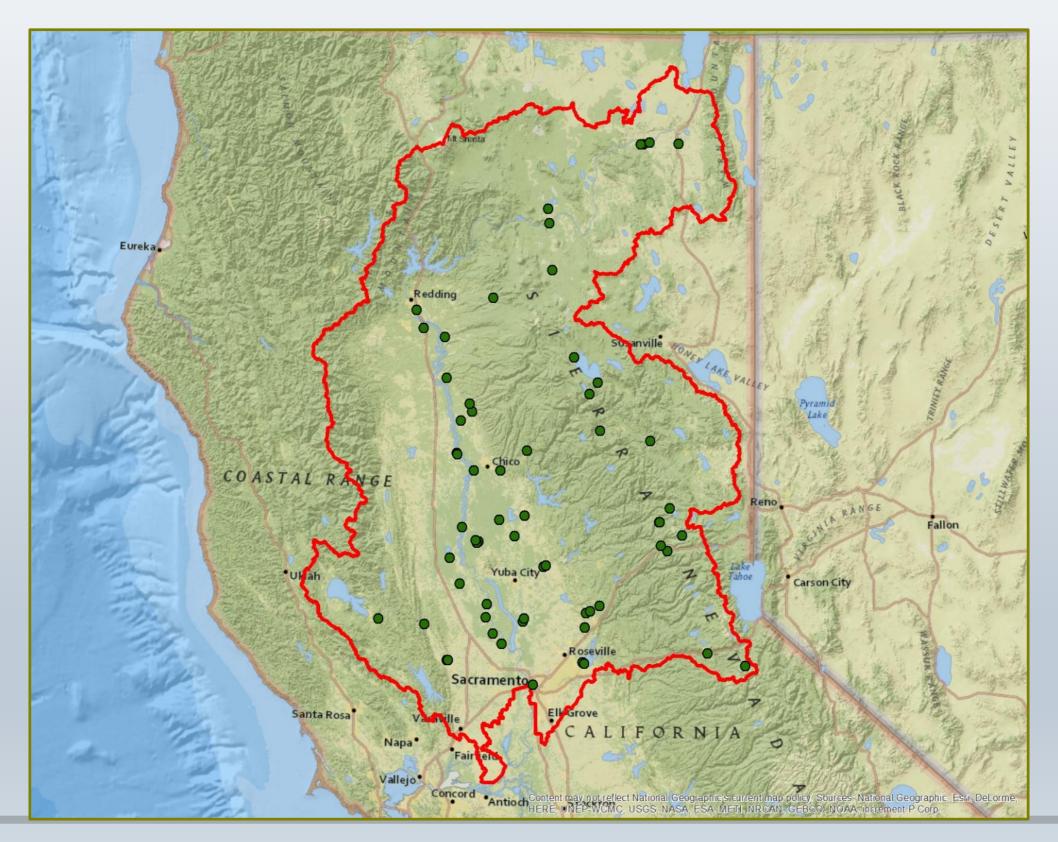
Responses from 1,061 Claims Accounting for 90% of Reported Use

Materials Posted to the Web Last Week and Presented to the State Water Board on Tuesday

Area Subject to Information Order



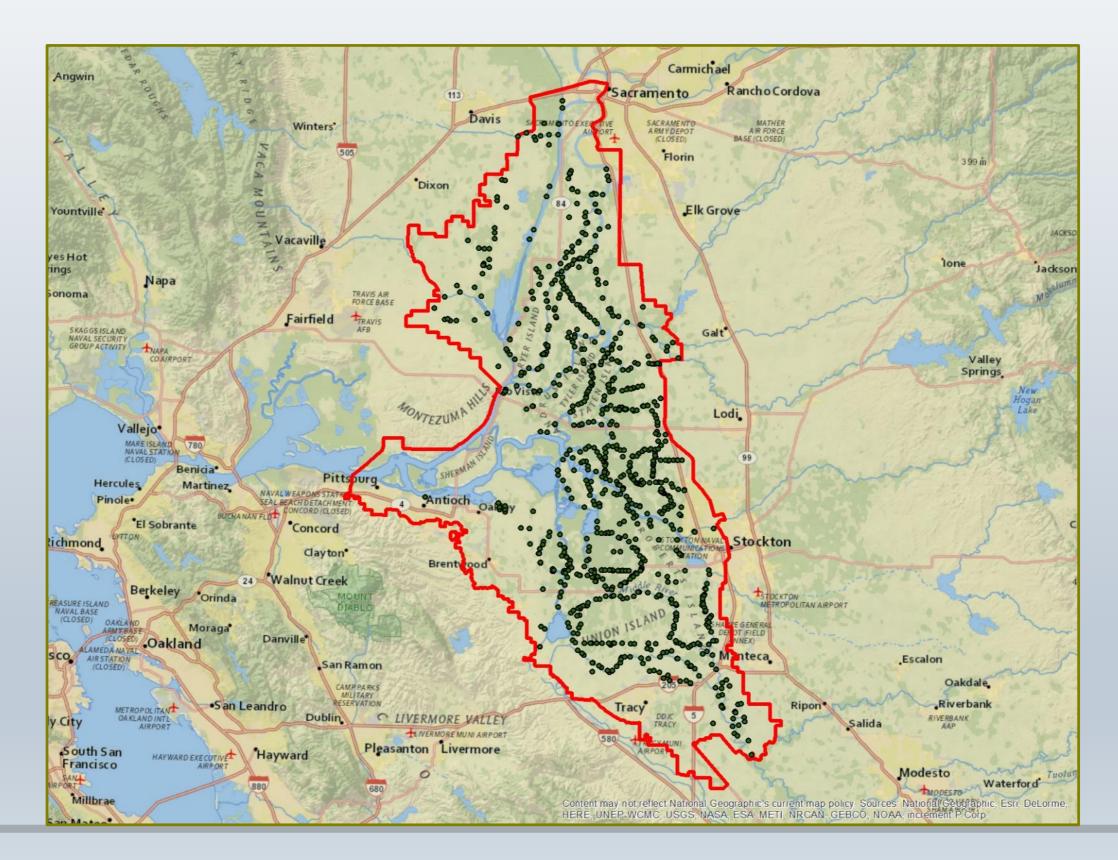
Sacramento River Watershed



San Joaquin River Watershed



Delta Watershed



First Comprehensive Taxonomy of Riparian and Pre-1914 Claims in the Watershed

		Riparian Category					Pre-1914 Category				
Claim	Total Statements	R1	R2	R3	R4	N/A	P1	P2	Р3	P4	N/A
Only Riparian		9	9	18	72	0	0	0	0	72	36
Only Pre-14	75	0	0	0	6	69	27	11	31	6	0
Both	864	113	142	344	265	0	522	14	73	255	0
Neither	14	1	0	0	12	1	0	0	0	12	2
Total	1061	123	151	362	355	70	549	25	104	345	38

Security Blanket of a Water Supply Contract

Water Quality Control Plan

- Phase 1 San Joaquin River Flows & Southern Delta Salinity
 - ✓ March 2018 Response to Comments
- Phase 2 (Sacramento and Delta)
 Scientific Basis Report Under Review
- Flow Standards Required for WaterFix Change Petition Decision
- Voluntary Agreements May be Under Negotiation "Off Stage"





Can we "Leapfrog" Mandate to Measure Every Diversion?

Will Data Support Limited Measurement + Extrapolation?

Will Real-time Data Supplant Diversion Measurement?

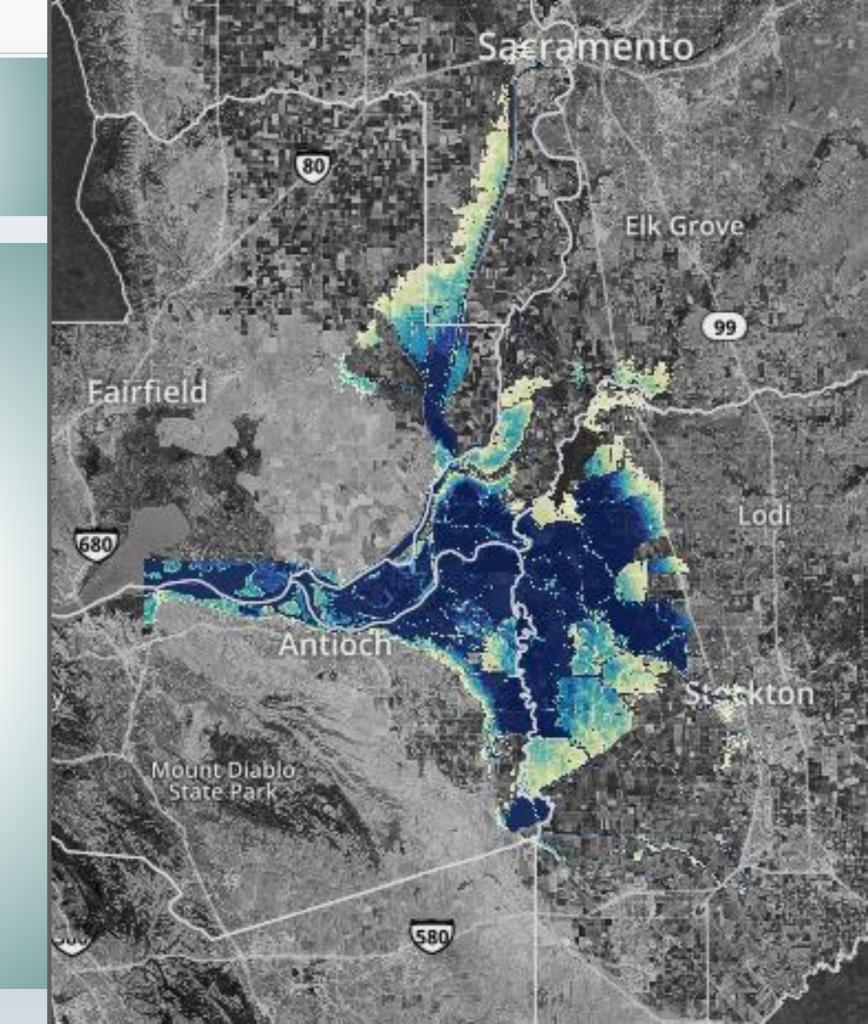
- -No Storage
- -How to Differentiate Reservoir Releases from Natural Flow?



Sea Level Rise Scenario

- SacramentoSan JoaquinDelta
- Inundation of 100-year Flood with 1.4M of Sea Level Rise

(Cal-Adapt.org)





Narrow Path for Progress: Entrenched Interests, Conflicting Laws, Constant Litigation

Ecosystem, Water Supply and Delta as a Place are All Deteriorating

One Delta/One Science and the Delta Plan Represent Potential Harbingers of a Path Forward

Balancing Competing Values is Hard Work

Facing Climate Change Requires Planning Now for the Delta's Future

